nubeca

# RT-1241

## Infrared Forehead non-contact Thermometer

OWNER'S MANUAL

# IMPORTANT SAFETY INSTRUCTIONS
# READ THIS BEFORE USING

**The following basic safety precautions should always be taken.**

1. Close supervision is necessary when the thermometer is used by, on, or near children, handicapped persons or invalids.
2. Use the thermometer only for the intended use described in this manual.
3. Do not use the thermometer if it is not working properly, or if it has suffered any damage..

**KEEP THESE INSTRUCTIONS**

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# CAUTIONS AND WARNINGS

- As with any thermometer, proper technique is crucial to obtaining accurate temperature readings. **Please read this manual thoroughly and carefully before using.**
- Always operate the thermometer in an operating temperature range 10°C to 40°C (50°F to 104°F), and relative humidity less than 95%.
- Always store the thermometer in a cool and dry place -20°C to 60°C (-4°F to 140°F) and relative humidity less than 95%
- **Avoid direct sunlight**.
- **Avoid dropping** the thermometer, if it happens and you think the thermometer may be damaged, please contact customer services immediately.
- **Do not** touch the lens.
- **Do not** disassemble the thermometer.
- Basic safety precautions should always be observed, especially when the thermometer is used on or near children and disabled persons.
- This thermometer is not intended to substitute for a consultation with your physician.
- The forehead scan temperature serves as a **reference only. It cannot be a judgment on fever.**

# RESTRICTIONS OF USE

This thermometer is clinically proven to produce accurate temperature measurements. However, please be advised if you have the following situations: The accuracy cannot be ensured when the thermometer is not clean. Check that the probe is clean before taking a measurement.

# INTRODUCTION

Thank you for choosing RT-1241 Thermometer. Please read this instruction manual first so you can use this thermometer safely and correctly. Please keep this instruction manual for future reference. This innovative medical device uses advanced infrared (IR) technology to measure temperature instantly and accurately on the forehead/surface.

## Intended Use

RT-1241 Thermometer is intended for the intermittent measurement and monitoring of human body temperature from forehead measurement at home. The device is intended for use by people of all ages in the home.

## How does it work

The thermometer measures the infrared heat generated by the surface of the skin over the vessel and its surrounding tissue. The thermometer then converts it into a temperature value.

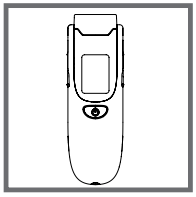
**NOTE**

The thermometer does not emit any infrared signal.

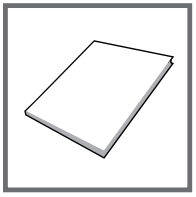
# HIGHLIGHTED FEATURES

- Fast and accurate: meets the accuracy requirement specified in ASTM E1965-98 and the EC directive 93/42/EEC.
- Non-contact measurement that does not require probe cover, thereby saving cost of replacement.
- Automatically power off if left idle for 30 seconds.
- Memory function allows you to recall previous results up to 10 previous results.
- Easy to read LCD with backlight in a dark environment.
- Able to measure temperature of other objects without contact and room temperature.

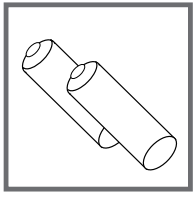
# PACKAGE CONTENTS



RT-1241 Thermometer



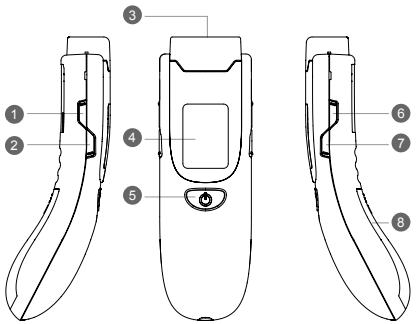
User's Manual



Two 1.5V AA batteries

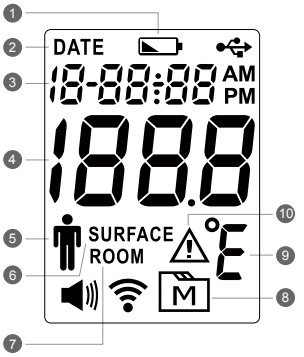
Warranty Card

# THERMOMETER PARTS



1. °C / °F Button
2. SET Button
3. Probe
4. Display Screen
5. On/Scan Button
6. MODE Button
7. MEM Button
8. Battery Cover

# DISPLAY SCREEN




1. Low battery indicator
2. Date indicator
3. Date/Time
4. Temperature reading
5. Body temperature indicator
6. Object surface temperature indicator
7. Room temperature indicator
8. Memory mode
9. Temperature unit
10. Error warning

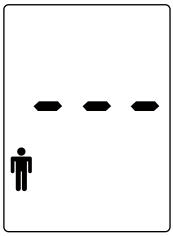
# DISPLAY MODE

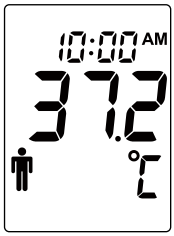
Three modes can be selected.

## 1. Body mode

This mode is used to measure the forehead temperature.

It also provides clock.

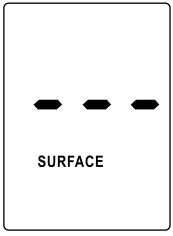





## 2. Surface mode

This mode is used to measure the object surface temperature.

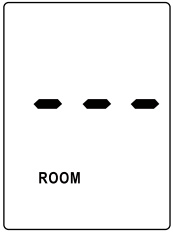
It also provides clock.

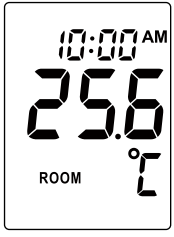


## 3. Room mode

This mode is used to measure the room temperature.

It also provides clock.



# SETTING THE THERMOMETER

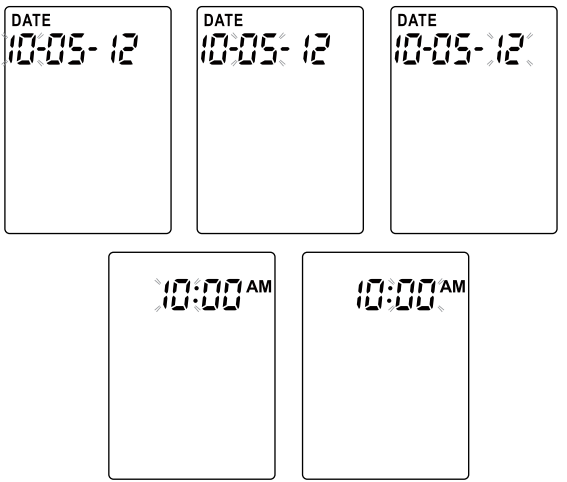
You will need to set time for first-time use or after replacing the battery.

## Step 1

Press the ⏻ to turn on the thermometer first. Press the SET for 5 seconds to enter the setting mode.

## Step 2 Set the date and time

- ▶ Press the Mode or °C / °F button to select the correct month.
- ▶ Press the SET to move on the next step.
- ▶ Press the Mode or °C / °F button to select the correct day/year/ hour/minute.




Setting is all completed. The thermometer will automatically turn it off.

**NOTE**

If the meter is idle for 30 seconds during the setting mode, it will switch off automatically.

# REPLACING THE BATTERY

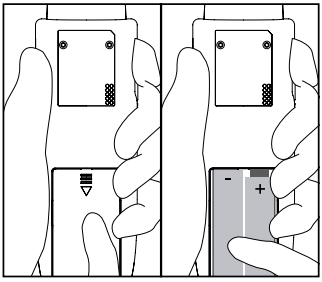
The thermometer comes with two 1.5 V AA alkaline batteries. The meter will display " ▭ " to alert you when the meter power is getting low. If " ▭ " and ⚠ appear both, please follow the steps below to replace new batteries immediately.

## Step 1

Remove the battery cover as the arrow direction accordingly. (Figure 1)

## Step 2

Remove the old batteries and replace with two 1.5V AA size alkaline batteries. (Figure 2)




(Figure 1) (Figure 2)

## Step 3

Close the battery cover. If the batteries are inserted correctly, you will hear a " beep " afterwards.

**NOTE**

1. Although the thermometer works when " ▭ " appears, we still recommend that you change the batteries to obtain an accurate result.
2. Remove the batteries if stored for a long period of time.
3. The batteries should be kept away out of child's reach. If they are swallowed, promptly see a doctor for help.

# ABOUT NORMAL BODY TEMPERATURE & FEVER

Body temperature can vary from one individual/person to next. It also varies by location on the body and time of day. Below shows the statistical normal ranges from different sites. Please keep in mind that temperatures measured from different sites, even at the same time, should not be directly compared. Fever indicates that the body temperature is higher than normal. This symptom may be caused by infection, overdressing or immunization. Some people may not experience fever even when they are ill. These include, but are not limited to, infants younger than 3 months old, persons with compromised immune systems, persons taking antibiotics, steroids or antipyretics (aspirin, ibuprofen, acetaminophen), or persons with certain chronic illnesses. Please consult your physician when you feel ill even if you do not have fever.

Table 1*[1] Body Site Normal Temperature Range

| | |
|---|---|
| Oral | 0.6°C (1°F) or more above or below 37°C (98.6°F) |
| Rectal/ear | 0.3°C to 0.6°C (0.5°F to 1°F) higher than oral temperature |
| Axillary (armpit) | 0.3°C to 0.6°C (0.5°F to 1°F) lower than oral temperature |

*[1]. Body Temperature at WebMD;

website: http://firstaid.webmd.com/body-temperature retrieved at 2010 Jan 7.

# SELECT THE TEMPERATURE UNIT

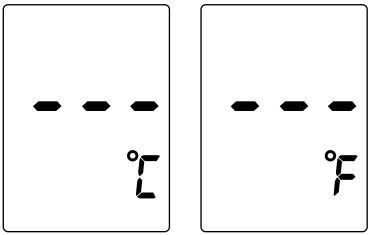
This meter provides two measurement units used for indicating the body / surface / room temperature, °C or °F, for your preferred selection.

## Step 1

Press the ⏻ to turn on the thermometer first.

## Step 2

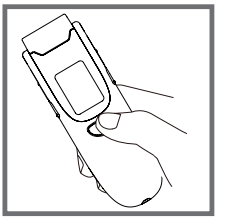
Press the °C / °F button to select. Press the ⏻ to begin the measurement or keep the meter in idle for 30 seconds to automatically turn it off.



# USING THE DEVICE

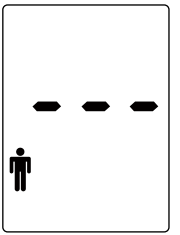
## As a Body Measurement Thermometer

**Step 1 Remove the front protective cap if present. Press ⏻ to turn on the thermometer.**



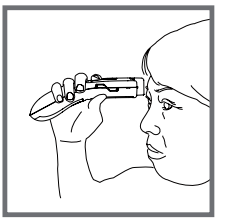
**Step 2 Press the Mode button for 5 seconds to enter the display mode to select Body mode.**

The Body temperature indicator " " flashes.



**Step 3 Move the probe close to the forehead.**

Press and hold the ⏻ . Make sure the probe is flat and close to the forehead, not at an angle. Perform a forehead measurement with a distance within 5 cm.



**Step 4 Read the result.**

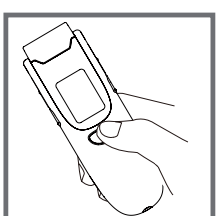
Release the button and read the result. " " is shown together with a temperature value and two short beeps.

**NOTE**

- As the forehead measurement temperature is likely to be affected by sweat, oil and the surroundings, the reading shall be taken as a reference only.
- If the probe is placed at an angle close to the forehead measurement, the reading will be affected by surrounding temperature.
- The thermometer will automatically turn off if left idle for 30 seconds.

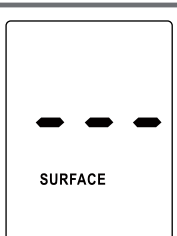
## As a Surface Measurement Thermometer

**Step 1 Remove the protective cap if present. Press ⏻ to turn on the thermometer.**

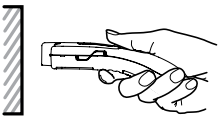


**Step 2 Press the Mode button for 5 seconds to enter the display mode to select Body mode.**

The Surface temperature indicator " SURFACE " flashes.



### Step 3 Move the probe close to the object surface.



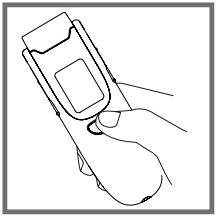
Press and hold the . Make sure the probe is flat and close to the object surface, not at an angle. Perform an object measurement with a distance within 5 cm.

### Step 4 Read the result.

Release the button and read the result. " SURFACE " is shown together with a temperature value and two short beeps.

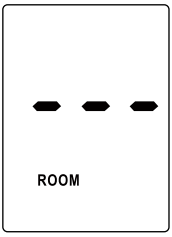
## As a Room Measurement Thermometer

### Step 1 Remove the protective cap if present. Press On/Scan button to turn on the thermometer.



## Step 2 Press the Mode button for 5 seconds to enter the display mode to select Room mode.

The Room temperature indicator " ROOM " flashes.




## Step 3 Press and hold the On/Scan button.

The built-in sensor inside the thermometer will capture the ambient temperature automatically.

## Step 4 Read the result.

Release the button and read the result. " ROOM " is shown together with a temperature value and two short beeps.

# RECALLING THE MEMORY

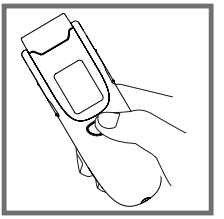
Your thermometer stores 10 most recent readings

## Step 1

Be sure the thermometer is OFF before recalling this memory.

## Step 2

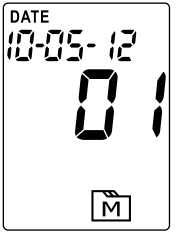
Press the ⏻ to turn on the thermometer.



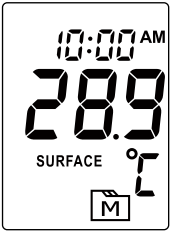
## Step 3

Press the MEM button to enter the memory mode.

Each time you press the MEM button, a result will be displayed in the order of dates (latest result shown first), together with " M " and number ( from 1 to 10 ).



When the memory is full, the oldest result is deleted as the new one added. When the last record is displayed, press MEM button again to return the first record.



### Step 4 Exit the memory.

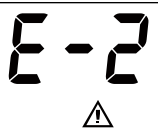
Press ON/SCAN button to return to the measurement mode or keep the meter in idle for 30 seconds in the memory mode, it will switch off automatically.

## CARE & CLEANING

- The probe is not waterproof. Please wipe with a clean and dry cotton swab to clean the probe on the inside.
- The body of the thermometer is not water-resistant. Never put the thermometer under a running tap or submerge it into water. Use a soft and dry cloth to clean it. Do not use abrasive cleaners.
- Store the thermometer in a cool and dry location. Free from dust and away from direct sunlight.

# TROUBLESHOOTING

The table below shows problems you may encounter. All error messages below would be shown together with backlight. Please follow “what to do” to resolve problems. If the problem still exists, please call your local dealer for help.

| Message | What it means | What to do |
|---|---|---|
| | Appear when environmental temperature is below system operation range. | Put the thermometer under operating temperature range of 10°C to 40°C (50°F to 104°F). |
|  | Appear when environmental temperature is above system operation range. | Put the thermometer under operating temperature range of 10°C to 40°C (50°F to 104°F). |
| | Battery is low and “  ” appears on LCD. | Please replace batteries as soon as possible. |
| | Problem with the thermometer. | Please put the thermometer under operating temperature range of 10°C to 40°C (50°F to 104°F). If the problem is unsolved, please contact the customer service line. |
| | Battery is very low. | Please replace batteries prior to further use. |
| | Body mode temperature is below 22°C (71.6°F) | Please follow this manual to take a reading again. |
| | Body mode temperature is above 44°C (111.2°F) | |

# SPECIFICATIONS

| | |
|---|---|
| Model no. | RT-1241 |
| Dimensions | 150mm(L) x 48.48mm(W) x 55.16mm(H) |
| Weight | 128.8 g<br>(include 2 x1.5V AA batteries) |
| Battery | 2 x 1.5 V AA alkaline batteries |
| Displayed temperature range | 22°C to 44°C (71.6°F to 111.2°F) |
| Display resolution | 0.1°C / 0.1°F |
| Accuracy | ▶ ±0.2°C (±0.4°F) for the range of 36.0°C to 39.0°C (96.8°F to 102.2°F)<br>▶ ±0.3°C (±0.5°F) for less than 36.0°C (96.8°F) and greater than 39.0°C (102.2°F) |
| Temperature unit | °C or °F |
| Operating temperature range | 10°C to 40°C (50°F to 104°F) |
| Operating humidity | 95% RH or less |
| Storage temperature range | -20°C to 60°C (-4°F to 140°F) |
| Storage humidity | 95% RH or less |
| Memory capacity | 10 measurements |

# SYMBOL INFORMATION

| Symbol | Referent |
|---|---|
| | Consult instructions for use |
| | Manufacturer |
| SN | Serial number |
| | Caution, consult accompanying documents |
| CE 0123 | CE mark |
| | Type BF Equipment |
| | Do not use if package is damaged |
| EC REP | Authorized representative in the European Community |

# REFERENCE STANDARDS

**Device Standard:**

Device Corresponds to the requirements of the standard for infrared thermometers

ASTM E1965-98

EN 12470-5

EN 60601-1- 2:2007/AC:2010

EN 60601-1-4:1996

EN 60601-1-6:2010

**Electromagnetic Compatibility:**

Device fulfills the stipulations of the standard

EN 60601-1-2

CE 0123

The stipulations of EU-Directive 93/42/EEC for Medical Devices Class IIa have been fulfilled.